

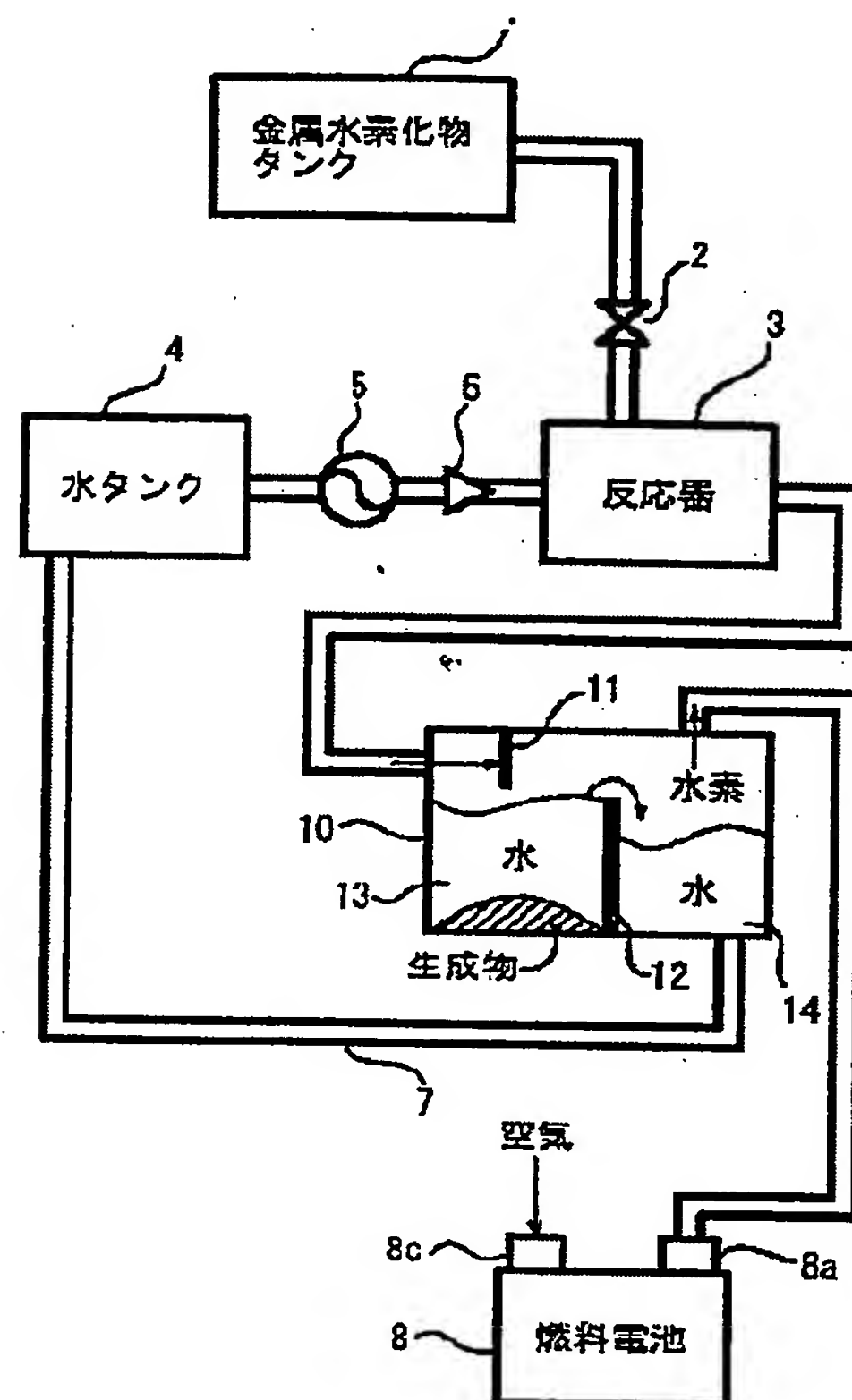
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APPLICANT : TOYOTA MOTOR CORP;

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TITLE : GASEOUS HYDROGEN PRODUCING
DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To efficiently produce gaseous hydrogen using a metal hydride called as a chemical hydride.

SOLUTION: The metal hydride is hydrolyzed in a reactor. Impurities are separated from a mixture of the produced hydrogen, water and metal-containing products by a separator 10. In the separator, the flow speed of the mixture is lowered to precipitate the product by lowering the falling down of the impurities and to separate water from the product. The supernatant water is recovered to be recycled for the hydrolysis. Dissolved product may be deposited by decreasing the temperature in the separator. The purity of the resultant gaseous hydrogen is improved by the action of the separator. In addition, the decrease of a water tank volume and the miniaturization of the device are achieved by the recycle of the water.

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